

In re application of : McVay et al,
Title : VARIABLY CONFIGURED EXERCISE DEVICE
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COPY OF PENDING CLAIMS

1. (original) An exercise device comprising:
 - a vertical support member;
 - a guide slidably engaged with the vertical support member;
 - at least one rail having a first end portion and a second end portion, the first end portion of the rail being pivotally connected to the guide; and
 - an actuation mechanism operably connected to the guide and configured to selectively vary the inclination of the rail.
2. (original) The exercise device of claim 1, wherein the actuation mechanism includes a lead screw assembly mounted adjacent the vertical support member.
3. (original) The exercise device of claim 2, wherein the lead screw assembly includes a lead screw and a bi-directional motor having a motor shaft.
4. (original) The exercise device of claim 3, further comprising a threaded member mounted to the guide, the threaded member being configured to engage the lead screw for axial movement of the threaded member along the lead screw in response to rotation of the shaft.
5. (original) The exercise device of claim 1, further comprising a controller electrically connected to the actuation mechanism and an input device, the controller being configured to operate the actuation mechanism in response to a control signal from the input device.

6. (original) The exercise device of claim 5, wherein the input device includes a switch electrically connected to the controller.
7. (original) The exercise device of claim 5, wherein the controller includes a wireless receiver and the input device includes a wireless emitter to transmit the control signal to the wireless receiver of the controller.
8. (original) The exercise device of claim 7, wherein the exercise device includes at least one handle and the input device is positioned on at least one handle.
9. (original) The exercise device of claim 7, wherein the input device is a remote control.
10. (original) The exercise device of claim 7, wherein the control signal is transmitted from the wireless emitter to the wireless receiver of the controller via transmission means selected from the group consisting of infrared transmission, radio frequency transmission, and bluetooth transmission.
11. (original) The exercise device of claim 1, wherein the actuation mechanism is adjustable from a location remote from the exercise device.
12. (original) A variably configured exercise device comprising:
 - means for supporting an exerciser above a floor;
 - an actuation mechanism configured to adjust an orientation of the supporting means relative to the floor during an exercise routine;
 - an input device configured to generate a control signal from a location remote from the exercise device; and
 - means for controlling the operation of the actuation mechanism in response to the control signal from the input device to thereby adjust the orientation of the supporting means relative to the floor.

13. (original) The exercise device of claim 12, wherein the adjustment of the orientation of the supporting means varies an amount of resistance to the exerciser during an exercise routine.
14. (previously presented) The exercise device of claim 12, wherein the input device is at least one switch.
15. (original) The exercise device of claim 12, wherein the actuation mechanism includes a motor-driven linear actuator includes a motor, an elongate lead screw driven by the motor, and a drive element attached to the guide and threadedly associated with the lead screw to raise or lower the first end of the rail when the motor is operated to rotate the lead screw.
16. (original) The exercise device of claim 12, wherein the controlling means includes a wireless receiver and the input device includes a wireless emitter to transmit the control signal to the wireless receiver of the controller.
17. (original) The exercise device of claim 16, wherein the exercise device includes at least one handle and the input device is associated with the at least one handle.
18. (original) The exercise device of claim 16, wherein the input device is a remote control.
19. (original) The exercise device of claim 16, wherein the control signal is transmitted from the wireless emitter to the wireless receiver of the controller via transmission means selected from the group consisting of infrared transmission, radio frequency transmission, and bluetooth transmission.
20. (original) A variably configured exercise device comprising:
means for providing resistance to movement of a user;
an actuation mechanism configured to change an amount of resistance provided

by the means for providing resistance;

a wireless input device configured to generate a control signal; and

a controller configured to operate the actuation mechanism in response to the control signal from the input device to thereby change the resistance provided by the means for providing resistance.

21. (previously presented) A physical exercise/therapy apparatus comprising:
 - a bed support including an inclined surface, a bed support first end that is supported on a floor and a bed support second end;
 - a vertically oriented support that receives, holds and allows rotation of the bed support second end so that the bed support is held at a selected incline angle Θ relative to the floor;
 - a user support bed that supports a user and that moves along the bed support between the bed support first end and the bed support second end;
 - a command processor, located adjacent to or on the support bed, to receive and implement a command for a change in at least one control parameter associated with an exercise/therapy workout by the user; and
 - a vertical translation mechanism, associated with the vertical support, that translates the bed support second end along the vertical support by a selected amount in response to receipt of an electronic signal from the command processor, without requiring that the user dismount from the support bed and without requiring that the user interrupt an exercise/therapy workout.
22. (previously presented) The apparatus of claim 21, wherein the at least one control parameter is a measure of physical resistance associated with the workout.
23. (previously presented) The apparatus of claim 22, wherein the at least one control parameter is the incline angle Θ .
24. (previously presented) The apparatus of claim 21, wherein the command processor issues at least one electronic signal for the change in the at least one control parameter in

response to at least one of (i) manual entry by the user of the command and (ii) receipt of a voice command from the user.

25. (previously presented) The apparatus of claim 21, wherein the command processor issues at least one electronic signal for the change in the at least one parameter without requiring receipt of a manual entry and without requiring receipt of a voice command from the user.
26. (previously presented) The apparatus of claim 21, wherein the user support bed includes one or more weight bars that receive and hold one or more weights thereon.
27. (previously presented) A physical exercise/therapy apparatus comprising:
 - at least one rail having a first end portion that is supported on a floor and a second end portion;
 - a vertical support member that receives, holds and allows rotation of the second end portion of the at least one rail so that the at least one rail is held at a selected inclination angle Θ relative to the floor;
 - a user support platform that moves along the at least one rail between the first end portion and the second end portion of the at least one rail;
 - an input device, located adjacent to or on the user support platform, to receive and implement a command for a change in at least one control parameter associated with an exercise/therapy workout by the user; and
 - an actuation mechanism, associated with the vertical support member, that translates the second end portion of the at least one rail along the vertical support member by a selected amount in response to receipt of a control signal from the input device, without requiring that the user dismount from the user support platform and without requiring that the user interrupt an exercise/therapy workout.
28. (previously presented) The apparatus of claim 27, wherein the at least one control parameter is a measure of physical resistance associated with the workout.
29. (previously presented) The apparatus of claim 28, wherein the at least one control parameter is the inclination angle Θ .

30. (previously presented) The apparatus of claim 27, wherein the input device issues at least one control signal for the change in the at least one control parameter in response to at least one of (i) manual entry by the user of the command and (ii) receipt of a voice command from the user.
31. (previously presented) The apparatus of claim 27, wherein the input device issues at least one control signal for the change in the at least one parameter without requiring receipt of a manual entry and without requiring receipt of a voice command from the user.
32. (previously presented) The apparatus of claim 27, wherein the user support platform includes one or more weight bars that receive and hold one or more weights thereon.
33. (previously presented) An exercise device comprising:
a vertical support member;
at least one support rail having first and second end portions, the first end portion of the at least one support rail configured to be supported on a floor and the second end portion of the at least support rail slidably engaged with the vertical support member, wherein the at least one support rail is oriented at an inclination angle Θ relative to the floor;
a user support platform slidably engaged with the at least one support rail;
an input device located adjacent to or on the user support platform, the input device configured to receive a command from the user to initiate a change in the inclination angle Θ and to generate a control signal in response to such command; and
an actuation mechanism associated with the vertical support member, the actuation mechanism configured to selectively adjust, without requiring that the user dismount from the user support platform, the position of the second end portion of the at least one support rail relative to the vertical support member in response to the control signal, thereby changing the inclination angle Θ .